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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/925,594	08/09/2001	Derek Edward Williams	AUS920010058US1	5424

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EXAMINER

BONZO, BRYCE P

ART UNIT	PAPER NUMBER
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2114

DATE MAILED: 05/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No. 09/925,594	Applicant(s) WILLIAMS, DEREK EDWARD	
Examiner Bryce P Bonzo	Art Unit 2114	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 August 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,5,9,10,12,18-20,22,26,27 and 29 is/are rejected.
- 7) ☒ Claim(s) 4,6-8,13-17,11,21,23-25,30-34,28 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 April 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

NON-FINAL OFFICIAL ACTION

Status of the Claims

Claims 1, 2, 3, 5, 9, 10, 12, 18, 19, 20, 22, 26, 27, 29 are rejected under 35 USC §102.

Claims 4, 6-8, 13-17, 11, 21, 23-25, 30-34 and 28 are objected to while containing allowable matter.

Rejections under 35 USC §102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 3, 5, 9, 10, 12, 18, 19, 20, 22, 26, 27, 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Miyamori (United States Patent No. 5,978,937).

As per claims 1, 2, 3, 5, 9, 10, 12 Miyamori discloses:

1. A method for tracking intra-chip events within a data processing system, said method comprising:

detecting an event responsive to a state within an integrated circuit chip (column 6, lines 57-61); and

broadcasting said detected event on an off-chip system interconnect that is utilized to transmit non-diagnostic transactions within said data processing system (column 6, lines 62 through column 7, lines 14).

2. The method of claim 1, further comprising, responsive to the detection of said event, recording an occurrence of said event within an interface device that drives said off-chip system interconnect (column 7, lines 29-46).

3. The method of claim 2, wherein said broadcasting step comprises issuing a packet from said interface device denoting said occurrence of said event onto said off-chip system interconnect (column 7, 29-46).

5. The method of claim 3, wherein said issuing step is preceded by setting a transaction type identifier within said packet, wherein said transaction type identifier identifies said packet as a diagnostic packet (column 22, lines 39-43).

9. The method of claim 1, further comprising retrieving said packet from said off-chip system interconnect at a diagnostic logging device (Figure 4, item 30 via lines 80).

10. The method of claim 9, wherein said retrieving said packet at a diagnostic logging device comprises:

snooping said off-chip system interconnect (Figure 4, item 30 via lines 80);

determining whether or not said packet includes a diagnostic transaction type identifier (column 7, lines 24-54); and

in response to said packet including a diagnostic transaction type identifier, recording said event within said diagnostic logging device (column 7, lines 24-54).

12. The method of claim 1, wherein said off-chip system interconnect is a system address bus or a system data bus (Figure 4, 80 is a the processor bus and has both address and data buses).

Claims 18, 19, 20, 22, 26, 26, 27 and 29 are rejected as being the system of tracking intra-ship events of the method of claims 1, 2, 3, 5, 9, 10, 12, and are rejected on the same grounds.

Allowable Matter

Claims 4, 6-8, 13-17, 11, 21, 23-25, 30-34 and 28 are objected to while containing allowable matter.

The following limitations overcome the prior art in combination with all features of the claims as a whole:

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Claims 4 and 21:

wherein said off-chip system interconnect is a system address bus having active cycles during which data access transactions are delivered and inactive cycles during which data access transactions are not delivered, said issuing step comprising the step of delivering said packet on said system address bus only during inactive cycles.

Claims 6-8 and 23-25:

wherein said interface device is a bus interface unit that operates within a data storage system, said bus interface unit programmed to identify a given packet on said system interconnect in accordance with a transaction type field encoded within said given packet, said recording step comprising: identifying said packet as a diagnostic packet from data encoded within said transaction type field; and in response to said identifying step, storing said diagnostic packet within a diagnostic transaction queue.

wherein said event is precipitated by a data access transaction within said data storage system, said method further comprising associating a memory address with said diagnostic packet.

Claims 13-17 and 30-34:

wherein said interface device is included within a data storage device wherein said event is detected by a detection logic element, said method further comprising, in

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response to detecting said event, delivering an event detection signal from said detection logic element to said interface device.

Claims 11 and 28:

further comprising: extracting diagnostic data from said packet; and delivering said diagnostic data to a trace array logic device or a logic analyzer.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bryce P Bonzo whose telephone number is (703) 305-4834. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Beausoliel can be reached on (703) 305-9713. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Bryce P. Bonzo

Bryce P Bonzo
Examiner
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